

ABSTRACT

ACUTE TOXICITY TEST OF PORANG POWDER (*Amorphophallus oncophyllus*) AND KONJAC POWDER (*Amorphophallus konjac*) STANDARDIZED IN THEIR GLUCOMANNAN CONTENT IN RABBITS (*Oryctolagus cuniculus*)

Dian Fajryanti Jatiningrum

The aim of this study was to determine the acute toxic effects and lethal dose (LD₅₀) of *Porang* (*Amorphophallus oncophyllus*) and konjac (*Amorphophallus konjac*) standardized in their glucomannan content in rabbits. Glucomannan levels on each porang and konjac powder were 52,33 ± 0,74 (%w/w) and 61,24 ± 0,61 (%w/w). Glucomannan is one of the most viscous dietary fibers known and can be used as diet food therapy for diabetes mellitus. In the process of development as a herbal medicine, it is necessary to do toxicity testing such as acute toxicity testing. The method used in this research was randomized post control group design. The experimental animals used in this study were male white rabbits (*Oryctolagus cuniculus*). 36 rabbits were divided into 9 groups which consist of a negative control group, porang powder 92,7; 352,3; 1338,6; 5086,6 mg/kg rabbit weight, and konjac powder 92,7; 352,3; 1338,6; 5086,6 mg/kg rabbit weight. The observed parameter was mortality of rabbits used to determine Lethal Dose (LD₅₀). The LD₅₀ values was determined using three methods, i.e. weil method, linear equation method, and probit method. The results showed that each of *porang* powder and konjac powder at highest dosage 5086,6 mg/kg rabbit weight did not cause toxic effect and mortality to rabbits after observed for 24 and 48 hours. Hence, it can be concluded that *porang* powder (*Amorphophallus oncophyllus*) and konjac powder (*Amorphophallus konjac*) standardized in their glucomannan content are practically non-toxic.

Keywords: Acute toxicity, LD₅₀, *Amorphophallus oncophyllus*, *Amorphophallus konjac*, Glucomannan, Rabbits